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10/066,869	02/04/2002	David J. Cline	1454.2	6059

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EXAMINER

POLK, SHARON A

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 05/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/066,869

Applicant(s)

CLINE ET AL.

Examiner

Sharon Polk

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Information Disclosure Statement***

1. The information disclosure statement filed on February 11, 2002 has been considered by the examiner (see attached PTO-1449).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-26, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 20 and 24 are vague because they

recite "bathing or swimming pool." The examiner is not sure what a bathing pool is.

Could it also be a spa? Appropriate correction is required.

Claim 27 recites the limitation "the holding structure." There is insufficient antecedent basis for this limitation in the claim.

Claim 29 recites the limitation "the spa." There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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**Claims 20, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bajka (US 4,322,297) in view of Tompkins et al. (US 5,361,215).**

**Bajka teaches:**

In a bathing or swimming pool installation, including a pool water holding structure, a method for releasing water into the water holding structure (22 or 21), comprising:

providing a valve (31) connected to a water supply line (fig.1), the valve responsive to valve control signals to open and close, wherein the valve in an open state releases water from the water supply line into the water holding structure, and in a closed state prevents water from flowing from the water supply line into the water holding structure (col. 4, lines 61-col. 5, lines 1-2, col. 5, lines 41-43);

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setting the predetermined time during a programming mode (col. 8, lines 3-11).

storing in an electronic memory a time value corresponding to the predetermined time (col. 15, lines 19-30).

**Bajka lacks the teaching of:**

providing an electronic control system responsive to a user commands through a control panel to generate the valve control signals;

entering a user command through the control panel to actuate the valve;

opening the valve in response to the user command;

automatically closing the valve after a predetermined time has elapsed after opening the valve.

**Tompkins et al. teach :**

providing an electronic control system responsive to a user commands through a control panel (fig. 1);

entering a user command through the control panel (col. 16, lines 42-46).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bajka with the teachings of Tompkins et al. for the purpose of providing a spa control system with accurately and efficiently controls the operation of the spa. . . (col. 1, lines 61-62).

With regard to generating the valve control signals to actuate the valve, opening the valve in response to the user command, and automatically closing the valve after a predetermined time has elapsed after opening the valve. These features are taught by

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Tompkins et al. but as they relate to other features such as, pump operation, heating, and jet flow. (See col. 16, lines 56-66).

**Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bajka as modified by Tompkins et al. as applied to claims 20-22 above, and further in view of Sterghos et al.**

**Bajka as modified by Tompkins et al. teach the claimed invention except for:**

automatically closing the valve if the water level reaches an overfill level during the predetermined time interval.

**Sterghos et al. teach :**

automatically closing the valve if the water level reaches an overfill level (col. 6, lines 29-41).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bajka as modified by Tompkins et al. with the teachings of Sterghos et al. for the purpose of providing new types of multiport valves and water level sensors that are particularly conducive to the present automated control (col. 2, lines 38-40).

**Claims 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bajka in view of Sterghos et al.**

**Bajka teaches:**

In a bathing or swimming pool installation, including a pool water holding structure (22 or 21) and a pool control system (26), a method for automatically releasing water into the water holding structure, comprising:

providing an electronic pool control system capable of monitoring water parameters including water temperature (68)

providing a valve (31) connected to a water supply line (fig. 1), the valve responsive to valve control signals to open and close, wherein the valve in an open state releases water from the water supply line into the water holding structure, and in a closed state prevents water from flowing from the water supply line into the water holding structure (col. 4, lines 61-col. 5, lines 1-2, col. 5, lines 41-43);

**Bajka lacks the teaching of:**

the pool control system responsive to a water level sensor signal;

~~sensing the level of water in the water holding structure and generating the water~~

level sensor signal when the water level reaches a predetermined water level;

opening the valve in response to the sensor signal;

subsequently closing the valve.

**Sterghos et al. teach :**

the pool control system responsive to a water level sensor signal (106);

sensing the level of water in the water holding structure and generating the water

level sensor signal when the water level reaches a predetermined water level;

opening the valve in response to the sensor signal;

subsequently closing the valve (col. 6, lines 29-41, and col. 7, lines 61).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bajka with the teachings of Sterghos for the purpose of providing new types of multiport valves and water level sensors that are particularly conducive to the present automated control (col. 2, lines 38-40).

**Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bajka as modified by Sterghos as applied to claim 24 above, and further in view of Tompkins et al.**

**Bajka as modified by Sterghos teach the claimed invention except for:**

wherein the valve is automatically closed after a predetermined time has elapsed since opening the valve.

**Tompkins et al. teach :**

wherein the valve is automatically closed after a predetermined time has elapsed since opening the valve (col. 16, lines 61-64).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bajka as modified by Sterghos with the teachings of Tompkins et al. for the purpose of providing a spa control system with accurately and efficiently controls the operation of the spa. . . (col. 1, lines 61-62).

With regard to automatically closing the valve after a predetermined time has elapsed after opening the valve. This feature is taught by Tompkins et al. but as it relates to other features such as, pump operation, heating, and jet flow. (See col. 16, lines 56-66).



**Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bajka as modified by Sterghos as applied to claim 24 and further in view of Mogab et al. (US 5,878,447).**

**Bajka as modified by Sterghos teach the claimed invention except for:**  
wherein the valve is closed in response to a further signal from the water level sensor.

**Mogab et al. teach :**  
wherein the valve is closed in response to a further signal from the water level sensor (col. 3, lines 35-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bajka as modified by Sterghos with the teachings Mogab et al. for the purpose of providing an apparatus which causes the water fill valve to automatically turn on a water supply to the pool, thereby filling the swimming pool to a predetermined water level height (col. 3, lines 65-68).

**Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sterghos as modified by Bajka, and further in view of Tompkins et al.**

**Sterghos teaches:**

A pool controller system (100) for controlling operation of a pool service system including a water heater (106), a water filter (111), and for providing an automated water fill capability, comprising:

a valve (107) connected to a water supply line (fig. 1),

a filter for filtering water recirculated in the spa or pool; and pressure sensing apparatus for sensing a filter back pressure and providing filter pressure signals; and wherein the controller system is responsive to the filter pressure signals to provide a visual status signal indicating that the need for filter servicing in the event the filter backpressure exceeds a threshold (col. 6, lines 42-50).

**Bajka teaches:**

the valve responsive to valve control signals to open and close, wherein the valve in an open state releases water from the water supply line into the water holding structure, and in a closed state prevents water from flowing from the water supply line into the water holding structure (col. 4, lines 61-col. 5, lines 1-2, col. 5, lines 41-43);

**Tompkins et al. teach :**

an electronic controller system responsive to manually entered user commands through a control panel to generate the valve control signals, the controller system for actuating the fill valve to the open state in response to a predetermined user fill command, and for automatically closing the valve upon elapsement of a predetermined fill time interval (col. 16, lines 42-46, and (col. 16, lines 61-64).

wherein the controller is further responsive to user commands manually entered through a control panel for setting the fill time interval (fig. 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sterghos as modified by Bajka with the teachings of Tompkins et al. for the purpose of providing a spa control system with accurately and efficiently controls the operation of the spa. . . (col. 1, lines 61-62).

***Pertinent Prior Art***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure; US Patent Nos. 4,445,238, 5,790,991, 4,631,657 which disclose automatic water leveling systems.

***Communication With The PTO***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon Polk whose telephone number is 703-308-6257. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-305-7723 for After-Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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May 3, 2002

Sharon Polk

Patent Examiner – Art Unit 2836



BRIAN SIRCUS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800